

KROYCHIK, A.A., professor; ARABADZHI, T.M., ordinator.

Streptomycin therapy of acute gonorrhea in men. Vest.ven.i derm.
no.2:59 Mr-Apr '54. (MLRA 7:4)

1. Iz kliniki koshnykh i venericheskikh bolezney Stalinskogo meditsin-
skogo instituta. (Streptomycin) (Gonorrhea)

ARABATZHI, V. I.

RT-1475 (On anomalies of zones of audibility) Ob anomal'nykh zonakh slyshimosti.
SO: Meteorologiya i Gidrologiya, (5): 21-31, 1946

ARABATZHI, V. I.

3163. Absorption of acoustic waves in humid air and fog. V. I. ARABATZHI. *Adv. i Otdroby*, No. 3, 11-18 (1947) in Russian.
The paper contains a survey of the present state of knowledge of the theory of absorption of sound waves in clouds and fog. Size of water drops in the atmosphere, frequency of sound waves being propagated and chemical composition, as well as sound and zones of silence, are discussed. METEOROLOGICAL ABSTRACTS

PK 78T72

ARABADZHI, V. I.

Apr 1948

USSR/Physics
Sound - Speed
Sound - Measurements

"The Speed of Sound in Free Atmosphere," V. I. Arabadzi, 2 pp

"Priroda" No 4

Describes measurement of speed of sound from 18th century on. In 1939, Kukamyaki obtained the mean values: 330.8 mm/sec for frequencies under 1,000 cycles, and 331.7 mm/sec for frequencies over 1,000 cycles. These, however, may vary by ± 0.3 mm/sec since the accuracy of the temperature measurement in free atmosphere is $\pm 0.5^\circ\text{C}$.

78T12

ARABADZHI, V. I.

Jul 48

USSR/Electricity
Corona Discharges
Sparks, Electric

"Point Discharge," V. I. Arabadzhi, 5 pp

"Priroda" No 7

Presents characteristics of point discharges, based on experiments showing relationship between changes in the electric field gradient of the electrode and the occurrence of corona phenomenon or complete spark-over.

5/49T16

1892. Contact potential difference between water and ice. ARABADZHI, V. I. *Dokl. Akad. Nauk. SSSR*, 68 (No. 3) 811-12 (1948) In Russian.—There are no reliable data available on the p.d. of the water-ice contact which is important in meteorology. (According to the author, the collision between water droplets and ice crystals in thunder clouds is the cause of atmospheric electricity. Simpson's observation that the boundary between +ve and -ve electricity in clouds on an isothermal of $\sim -15^{\circ}\text{C}$ approximately coincides with the boundary between the water and ice phase may be taken to confirm this, all the more as the maximum field gradient in clouds also follows this isothermal). The method of the measurements was given by Frumkin (*Nature*, Aug. 2 (1924)) and the set-up included a RaTh collector and Wulf electrometer with a sensitivity of 30 ac.div./V, the collector being screened against outer influences. The contact p.d. was found to be $0.17 \pm 0.025 \text{ V}$.

537.221 : 551.594

B. F. K.

ASB M

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

GROUP	CLASS	INDEX	DESCRIPTION	REMARKS
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ARABADZHE, V. I.

PA 29/49T42

USSR/Geophysics

Atmosphere - Electricity
Ozone

Feb 49

"The Effect of Cyclones on the Ozone Content of the Atmosphere," V. I. Arabadzhe, 2 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 6

It is known that the content of ozone increases over a cyclone and decreases over an anticyclone. Attempts to explain this phenomenon. States it is due to a corona discharge, which is conditioned in turn by gradients of the electric field in a cloud formation. Submitted by Acad V. G. Fesenkov, 9 Nov 48.

29/49T42

ARABADZHI, V. I.

PA 43/49T66

USSR/Geophysics
Atmosphere - Sound, Absorption
Sound - Attenuation

Mar/Apr 49

"Attenuation of Sound in the Atmosphere," V. I
Arabadzhi, 3 pp

"Iz Ak Nauk SSSR, Ser Geog i Geofiz" No 2

Analyzes attenuation of sound, attributed to temperature fluctuation in an atmosphere close to earth's surface. Value obtained for attenuation coefficient approaches results obtained by Ziga, who conducted measurements in calm weather.
Submitted 10 Nov 48.

43/49T66

ARABADZHI, V. I.

Arabadzhi, V. I. "To raise the requirements for the practice of physics," Vestnik vyssh. shkoly, 1949, No. 3, p. 26

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949)

ARABADZH , V. I.

25524. Arabadzhi, V. I. Ob eleyektrizatsii zhidkostyey pri ikh rasp y lyenii.
Kolloidnyy shiziki, 1949, Vyp. 8, C. 911-30 Bibliogr: 13 Nazu.

So: Letipis' Ahurnal Statey, Vol 34, Moskva, 1949

ARABADZHI, V. I.

Electrification of Liquids During Their Atomization.
(In Russian.) V. I. Arabadzhii. *Soloidnyi Zhurnal* (Colloid Journal), v. 11, July-Aug. 1949, p. 200-210.

Develops theoretical proof of Frumkin's assumption that the intensity of electrification depends on contact-potential differences at the liquid-gas surface and that, with increasing temperature and decreasing liquid viscosity, electrification during atomization increases.

ARABACZHI, V. I.

"Damping of Sound in the Atmosphere," Iz Ak Nauk SSSR, Ser Geograf i Geofiz, Vol. 13,
No. 2, pp 162-165, 1949.

ARABADZHI, V.I.

USSR/Electricity - Lightning Protection Feb 50

"Lightning Protection," V. I. Arabadzhi

"Priroda" No 2, pp 17-22

Gives history of lightning-protection studies and briefly describes some recent studies in this field in the USSR. From 1938 through 1940, there were 9,000 fires caused by lightning in the USSR. Effectiveness of lightning protection is studied mainly in the All-Union Elec Eng Inst and in the Power Eng Inst, Acad Sci USSR. Stekol'nikov and his co-workers, Akopyan and Belyakov, head this work. Other important figures in lightning-protection studies are Gorev, Sirotinskiy, Burgsdorf, and Zalesskiy.

219T14

ARABADZHI, V. I.

"Electric wind from a point electrode." J. Tech. Phys., USSR, 20, 967-9, 1950.

A qualitative picture of the circulation of electric wind of the space charge around the point and measurements in a certain speed range. The speed field was mapped out for a point at a potential of 5 k V by exposures of 30 sec duration. Isolines were taken for 0.1 and 0.12 m/sec speeds. An inductor of 35 cm maximum sparking distance was used.

CA

Dispersion of light by drops near a corona discharge electrode. V. I. Araksadze (Pedagog. Inst., Minsk). *Kolloid. Zhur.* 13, 331-2 (1951).—H₂O vapor rise from an orifice into cool air. The light absorption by, and the particle size in, the fog obtained were detd. When a high-tension wire was placed over the orifice, both the droplets and the percentage of light transmitted became smaller. This explains why thunder clouds are bluish and greatly reduce the light intensity near the ground. The charge of these clouds breaks the droplets in them. J. J. Bikerman

ARABAD 2/H

V.I.C.

551.574.1:551.576.1
 Arabadzh V. I. O prichinakh kluboobrazovaniya. [On the causes of puff formation.]
 Meteorologiya i Klimatologiya, No. 8:27-28, 1952. 3 refs., 5 eqs. DLC--N. E. Zhukovskii
 assumed that smoke-puff formation by a chimney-stack depended on periodical pressure
 variations originated by smoke escape. The frequency of oscillations in this case can be
 determined from the equation $\omega^2 = \frac{k}{m}$; where k is elasticity of resonance medium, and m is
 the mass of air oscillating inside the resonator. The popular resonance theory helps to
 determine the vertical size of smoke-puff, which can be calculated by the equation
 $Z = \frac{2\omega h}{c} \sqrt{\frac{V}{q}}$; where Z is vertical size of puff, λ is velocity of smoke, c —velocity of sound,
 h —height of resonator mouth, V —volume of resonator, q —square cross section of resonator
 mouth. The calculation of frequency by the formula gives the frequency 2-3 hertz, which
 is in a good agreement with experiments. The formula shows that vertical size of the puff
 varies with the puff volume, velocity current, and height of resonator mouth, and can be used
 for cases of puff formation in clouds, where analogous relations are observed. If we take into
 consideration the following values of the equation members ($h = 10$ m, $q = 10^4$ m², $V = 10^6$ m³,
 $c = 1.10^3$ m/s, $\lambda = 1$ m/sec) which are realized approximately in natural cloud formation, then Z
 will be equal to 60 m, i.e., to the value usually observed in well developed cumulus clouds.
 Subject Headings: 1. Cloud physics. 2. Cumulus clouds.—N.T.Z.

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ARABADZHI, V. I.

USSR/Geophysics - Thunder

21 Jan 52

"Certain Characteristics of Thunder," V. I.
Arabadzhi

"Dok Ak Nauk SSSR" Vol LXXXII, No 3, pp 377, 378

Investigates the variation of atm pressure as a
function of time of thunder for various distances.
Cf B. Schonland, Proc Roy Soc, No 874, 621, 1935;
A. Workman, Phys, 7, 375, 1936. Submitted by Acad
V. V. Shuleykin 17 Nov 51.

211T56

ARABADZHI, V.I.

Kinetics of the spattering of drops. Meteor. i gidrol. no. 4:39
Ap '53. (MLRA 8:9)

1. Pedagogicheskiy institut, Minsk.
(Drops)

ARAFADZHI, V. I.

"Spraying of Drops in an Air Current," Meteorol. i gidrologiya, No 8, 1953, pp 28-29

The author carried out experiments on the spraying of drops of water 2.7-3 mm in radius in an air stream with velocity 8 m/sec, during which he took moving pictures at the rate of 26-47 frames per second. He studies the peculiarities in the variation of shape and disruption of the drops when an electric field of approximately 1000 v/cm is impressed upon the experimental space. (RZhGeol, No 5, 1954)

SO: Sum No. 568, 6 Jul 55

ARABADZHI, V.I., kandidat fiziko-matematicheskikh nauk

~~Phenomenon of thunder. Meteor. i gidrol. no.9:37-39 S-0 '53.~~
(Thunderstorms) (MLRA 8:9)

"Contribution to the Study of Tornadoes"
Meteorol. i Gidrologiya, No 2, 26-27, 1954

The author describes laboratory experiments on the formation of artificial tornadoes. (RZhGeol, No 1, 1955)

SO: Sum. 492, 12 May 55

ARABADZHI, V. I.

USSR/Meteorology Storms

Card : 1/1

Authors : Arabadzhi, V. I.

Title : Geographical peculiarities of storms

Periodical : Priroda, 43/7, 96 - 99, July 1954

Abstract : A brief explanation of the origin of storms is given. The diminution of storm phenomena with the distance from the equator is dealt with and the regions constituting exceptions to this rule are enumerated. Data and elucidations of the electrical manifestations accompanying storms are presented. Maps.

Institution :

Submitted :

AID P - 3847

Subject : USSR/Meteorology

Card 1/1 Pub. 71-a - 10/35

Author : Arabadzhi, V. I.

Title : ~~On electrified particles in clouds~~
On electrified particles in clouds

Periodical : Met. i. gidr., 6, 37, N/D 1955

Abstract : A theoretical analysis on causes for the accumulation of positively-charged drops in the upper section of a cloud, while the heavier and larger negatively-charged drops are found in the bottom layers. The process of ice-cloud formation is explained. Two Russian sources, 1941-1946, 1 German, 1950.

Institution : None

Submitted : No date

ARABADZHI, V. I.

"On the Theory of the Phenomenon of Atmospheric Electricity,"
pp 79-98, 30 ref

Abst: An analysis is given of various phenomena related to atmospheric electricity. The article examines the discharge of streak lightning and computes the pressure in streak lightning channels. Certain relationships which were obtained in a thermodynamic approach to storm processes are analyzed with a computation of electrical conditions. The electrical field of the earth's surface is examined.

SOURCE: Uchenyye Zapiski Minsk. Gos. Pedagogich. In-ta im. A. M. Gor'kogo (Scientific Notes of the Minsk State Pedagogical Institute imeni A. M. Gor'kiy), No 5 -- Physics-Mathematics Series, Minsk, Uchpedgiz, 1956

Sum 1854

ARBADZH, V.I.

Electric properties of water and ice V.I. Arbadzh
Soviet Phys., JETP 3, 285-7 (1956) (English translation)
See C.A. 50, 14289i. B. M. R.

ARABADZHI, V.I.

Impact kinetics of a drop. Meteor.i gidrol. no.4:35-36 Ap '56.

(MLRA 9:8)

(Drops)

ARABADZHI, V. I.

Category: USSR

B-14

Abs Jour: RZh--Kh, No 3, 1957, 7752

Author : Arabadzhi, V. I.

Inst : Not given

Title : On the Atomization of Water Droplets in an Air Stream

Orig Pub: Kolloid. Zh., 1956, Vol 18, No 3, 262 (with English summary)

Abstract: A number of experiments have been carried out in which water droplets 2.7-3 mm in diameter were atomized in an air stream flowing at the rate of 8m/sec. The process was photographed using shutter speeds of 47 and 1,500 frames/sec. In only 5% of the cases did the process proceed according to Hochschwender (P. Lenard, Ann. Physik., 1921, 4, 65, 629). In the remaining cases the water droplets were already deformed when they hit the atomizing stream. Atomization always began with the rupture of the thin film which is formed on the drops (most frequently at the center). This phenomenon confirms the theory of the balloelectric effect proposed by Lenard and Frenkel.

Card : 1/1

-6-

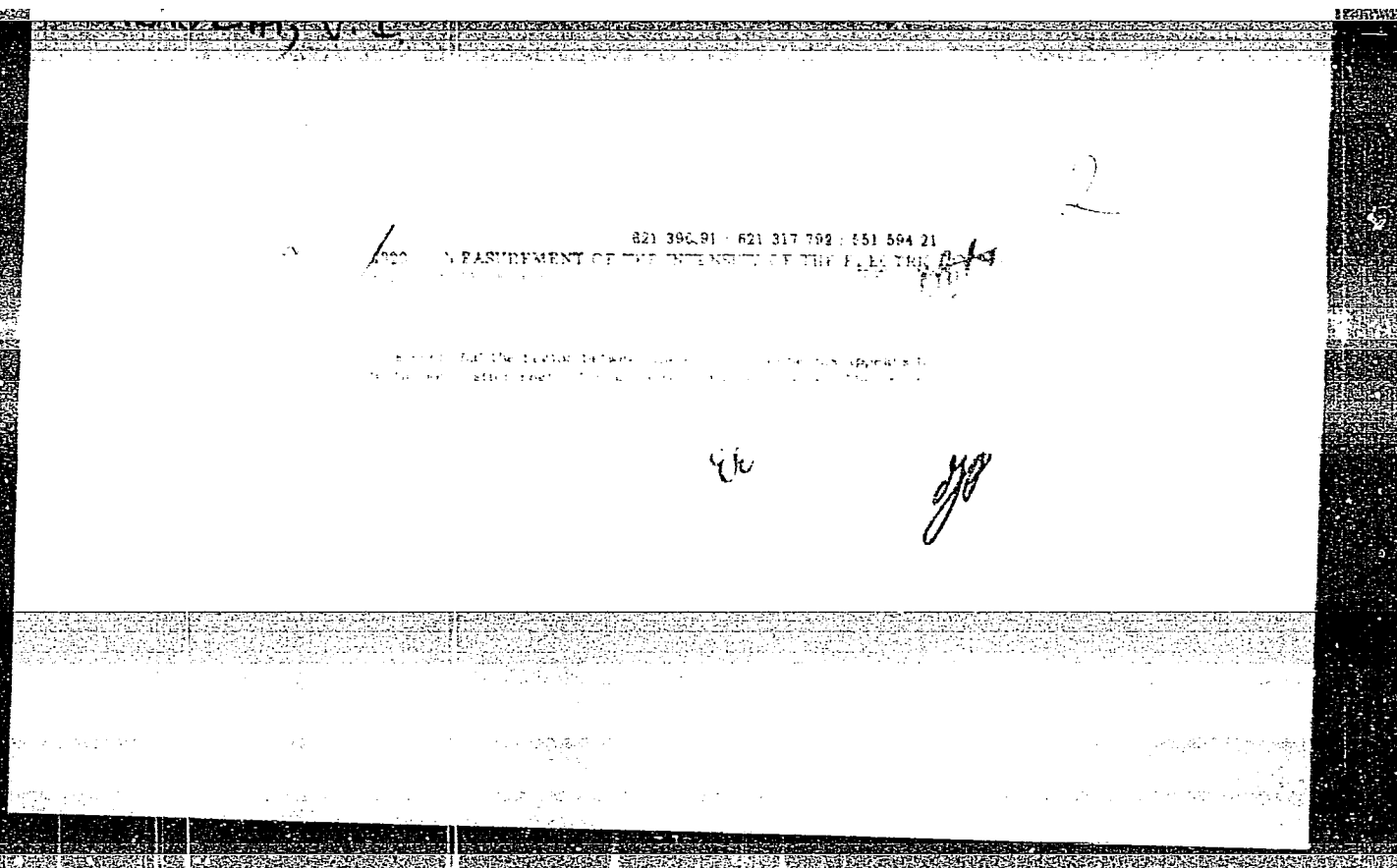
ARABAIYZHI, V.I.

Modeling of a spark discharge between regions of space charge concentration [with English summary in insert]. Koll.zhur. 18 no.5:513-514 S-O '56. (MLBA 9:11)

1. Minskiy gosudarstvennyy pedagogicheskiy institut imeni A.M. Gor'kogo. (Aerosols) (Electric discharges)

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for the first time
and the

electricity. Four experiments are described. The charges obtained are dependent on the area of the electrode and the thickness of the ice. The charges also depend on the duration of the polarization after the application of a direct voltage for one hour to 11. It was roughly equal to 9 volts for every volt per cm applied. The potential between water and ice was measured with a thermocouple. The average result was 1.5 mV. The potential difference produced a current of 1.5 mA.



80384

SOV/169-59-3-2760

5.3900

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 3, p 105 (USSR)

AUTHOR: Arabadzhi, V.I.

TITLE: Some Characteristics of the ¹⁴Electric State of Thunderclouds
and of the Thunderous Activity

PERIODICAL: Uch. zap. Minskiy gos. ped. in-t, 1957, Nr 7, pp 67 - 85

ABSTRACT: Estimations are given of: 1) the electric energy of a thundercloud; 2) the part of the charge fluctuation of a thundercloud in the formation of a lightning discharge; 3) the duration of the first discharge; 4) the time required for the regeneration of the electric state of a thundercloud. The author explains the importance of the energy consumption for splitting the rain drops in the electric field of a thundercloud. According to the author's estimation, the temperature of a thundercloud can decrease by 1 - 2°C because of this energy. A cubic resonator was used for measuring the sound pressure caused by thunder in different frequency ranges. The basic thunder wave originates always at a compression. The basic energy is found in the

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SOV/169-59-3-2760

Some Characteristics of the Electric State of Thunderclouds and of the Thunderous Activity

frequency range of 0.25 to 2 cps, but most of it is in the 0.5 cps range. The pressure of the component not discernible by hearing is found within the limits of 10^4 and $7 \cdot 10^4$ bar. The basic part of the component discernible by hearing is found in the frequency range of 150 to 250 cps, reaching 500 cps, and the pressure of this component is within the limits of 4 to 60 bar (according to data of 24 measurements). The number and the polarity of lightning discharges was recorded by a special device. A 10-m long antenna suspended at a height of 15 m, was used for receiving the signals. The range of the device amounted to 10 km. Measurements during 20 thunderstorms showed that the number of discharges during one thunderstorm varied from 12 to 289, the average number amounted to 115. The author states that the probability of a lightning stroke depends not only on the number of lightnings but also on the terrain features of the locality and on the electric conductivity of the soil. It is explained that the thunderstorm activity in mountain areas decreases with increasing altitude. A comparison of Klossovskiy's and

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SOV/169-59-3-2760

Some Characteristics of the Electric State of Thunderclouds and of the
Thunderous Activity

Brooks' (Bruks) data on the number of annual thunderstorm days with the
data published at present, leads the author to the opinion of a variation
in the activity of the world's thunderstorm centers.

I.M. Imyanitov

4

Card 3/3

ARABADZHI, V.I.

Kinetics of spattering of water drops in an electric field [with
summary in English]. Koll. zhur. 19 no.6:756 N-D '57. (MIRA 11:1)
(Electric fields) (Water) (Drops)

80790

SOV/169-59-6-6072

3.5000

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 6, p 95 (USSR)

AUTHOR: Arabadzhi, V.I.

TITLE: Some Problems of the Physics of Thunderstorm Processes

PERIODICAL: Uch. zap. Minskiy gos. ped. in-t, 1958, Nr 9, pp 91 - 105

ABSTRACT: A special device was built for measuring the point discharge current during thunderstorms. It consists of an amplifier in which the constant voltage to be measured is modulated by an alternating signal produced by a special generator, and the point which is connected to the ground by a 50 megohm resistor. The voltage developed at the latter during the appearance of the current at the point is measured by the amplifier. The brass point was installed on the roof of a four-story building on a 3 m long vertical rod. Simultaneously with these measurements, the field intensity was measured with an electrostatic fluxmeter, and, using a special device, the number and the polarity of the lightning discharges were established. According to data of measurements during 16 thunderstorms the loss of

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Some Problems of the Physics of Thunderstorm Processes

positive charge by the earth at the periphery of the thunderclouds exceeds by approximately 2 times the loss of negative charge. The average number of discharges during the thunderstorms observed amounted to 1.6 min^{-1} . The numbers of discharges of different polarities were about equal. When investigating the corona discharge from a drop at the end of a capillary tube, it was established that the positive and the negative charge begin with one and the same threshold voltage, which shows the essential part of the destruction of the liquid surface and the discharge emission. Changes in the character of klydonographs during the approach of electrodes of opposed polarities were investigated for black- and-white and color photographic materials. The sphere effect (balloelektricheskiy effekt), when the drop is torn away from the liquid, which is to be realized by a stream of compressed air, directed at the liquid layer, causes negative charges in large and small drops, simultaneously giving a positive charge to the liquid. In the author's opinion, a comparison of the experiments confirms Lenard's viewpoint on the nature of the sphere effect. An attempt was made to examine the problem of

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SOV/169-59-6-6072

Some Problems of the Physics of Thunderstorm Processes

the charge of the head of a stepped leader, the changes of the dipole moment of a thundercloud during the discharge process, and to use on a thundercloud the methods of thermodynamic calculations, which are to be performed for galvanic cells.

I.I. Imyanitov ✓

Card 3/3

ARABADZHY, V.I., datsent.

What is the International Geophysical Year? Rab. i sial. 34
no. 3: 21 Mr '58.

(MIRA 11:3)

1. Minskay pedinstytut.

(International Geophysical Year, 1957-1958)

ARABADZHI, V. I.: Doc Phys-Math Sci (diss) -- "Thunderstorms and their processes". Minsk, 1959. 22 pp (Min Higher Educ USSR, Tbilisi State U im I. V. Stalin), 150 copies (KL, No 10, 1959, 122)

3(7)

AUTHOR:

Arabadzhi, V. I.

SOV/20-127-2-18/70

TITLE:

On the Electric Properties of Storm Precipitation

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 298-301
(USSR)

ABSTRACT:

In 1958 experiments were made in Minsk to increase the knowledge of storm precipitation. Charge and radius of single drops were determined simultaneously as well as the total current density. For this purpose an instrument consisting of three separate channels was used. Its mode of operation is described in detail. After discussing the calibration of the instrument the formula used for calculating the radius of the drops from measurement results is given. The radii obtained in this manner ranged from 0.47 to 0.63 mm, the charges varied from $2 \cdot 10^{-2}$ to $3.9 \cdot 10^{-2}$ cgse. Ten storms were recorded, six of which lasted longer than 30 minutes. Most of them were characterized by considerable precipitation, reaching an upper limit of 3.1 mm/min. In one measuring period 448 positive and 534 negative drops were counted, and in 6 of 10 storms the number of negatively charged drops exceeded that of the positively charged ones. The mean negative

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On the Electric Properties of Storm Precipitation SOV/20-127-2-18/70

charge of the drops was -0.02 cgse, the mean positive charge $+0.013$ cgse. In figure 3 a typical distribution of charges over the drops during a weak storm on June 22, 1958 is given. From measurements made during this storm the ranges of the charges and of the radii of the drops are stated. There are 3 figures.

PRESENTED: September 26, 1958, by D. I. Shcherbakov, Academician

SUBMITTED: September 24, 1958

Card 2/2

ARABADZHI, Vsevolod Isidorovich; GNS', N.D., red.; BELEN'KAYA, I.Ye.,
tekhred.

[Thunderstorms and processes associated with them] Groza i
gromovye protsessy. Minsk, Izd-vo Belgosuniv. im. V.I.Lenina,
1960. 230 p. (MIRA 14:1)
(Thunderstorms)

24812
S/049/61/000/004/007/008
D257/D306

3.5000

AUTHOR: Arabadzhi, V.I.

TITLE: On the electrical deposition of ice in a coronar discharge

PERIODICAL: Akademiya nauk SSSR. Izvestiya, Seriya geofizicheskaya, no. 4, 1961, 625 - 626

TEXT: The author describes a study of deposition of ice and soot in electrical discharges in the atmosphere. Experiments were designed to find whether there was a connection between the strong electric fields and the strong precipitation from those regions of storm clouds in which temperatures range from 0 to -15°C . Two electrodes, made of sewing needles, were fixed outside the second floor of a stone house 50 cm from the wall. The electrode gap was 12-16 mm and voltages of 4.5-10 kV were applied across the gap. In some experiments the negative electrode was earthed, and in other tests equal and opposite voltages were applied to the two electrodes. A glass

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On the electrical deposition ...

of boiling tap water was placed underneath the electrodes just before each experiment. All tests were carried out in fine weather at outdoor temperatures between -10 and -20°C; each test lasted about 20 minutes. Water, which rapidly turned to ice, or hoar frost was deposited always on the negative electrode. Very little or no deposition occurred on the positive electrode, or on a third neutral electrode, which was occasionally used. When the deposition on the negative electrode began, the current through the gap oscillated with an amplitude of 2.5 μ A. Similar results were obtained inside a domestic refrigerator and in the loft of a house covered by a concrete roof. When a kerosene oil burner was placed (instead of a glass of water) under the electrodes, soot was deposited on the negative electrode and not on the positive one. The deposition on the negative electrode is due to corona discharge being produced at lower voltages at the positive electrode. Water molecules or carbon particles are charged in the outer region of this positive corona and are then transported by the electric field to the negative electrode. The author suggests that the same process occurs in the

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ARABADZHI, V.I.

Two problems in the biophysics of plants. Biofizika 6 no. 2:247-249
'61. (MIRA 14:4)

1. Minskiy gosudarstvennyy pedagogicheskiy institut imeni A.M.
Gor'kogo.

(ACOUSTIC PHENOMENA IN NATURE)
(PLANTS—OPTICAL PROPERTIES)
(TREES)

ARABADZHI, V.I. (Minsk); ZINCHUK, S.D. (Minsk)

Acoustics of trees. Priroda 50 no.9:91-92 S '61.

(Acoustic phenomena in nature) (MIRA 14:8)

(Trees)

S/139/62/000/001/016/032
E073/E535

AUTHORS: Arabadzhi, V.I. and Rudik, K.I.
TITLE: On klydonograms of interacting electrodes
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
no.1, 1962, 103-104 + 2 plates
TEXT: A number of experiments were made for the purpose
of elucidating the changes in the character of the klydonograms
of interacting electrodes at various air pressures. The klydonograms
were produced on black and white and coloured photo-emulsions
of normal sensitivity. The voltage onto the electrodes was applied
using a spring-operated circuit breaker (exposure time 10^{-3} sec).
The gap was 35 mm and voltages between 5 and 15 kV were applied.
Photographs show the development of a discharge with two corona
emitting electrodes, each of which was supplied with either a positive
or a negative voltage. It was found that a decrease in the air pressure
leads to straightening and thickening of the streamer channels; the
conditions of development of the discharge in the neighbourhood of
the electrodes of differing polarities equalize at first and then

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On klydonograms of ...

S/139/62/000/001/016/032
EO73/E535

become somewhat more favourable at the negative electrode. At pressures below 50 mm Hg the klydonograms of interacting electrodes become thickened diffuse-light emitting columns, which are stretched along the line of distribution of the electrodes. Interesting corona phenomena were observed on a film onto the surface of which sulphur and iron powder was deposited in the form of small mounds prior to the discharge. The obtained results are useful for understanding the process of development of small scale electric discharges. There are 2 figures.

ASSOCIATION: Minskiy pedinstitut im. A.M. Gor'kogo
(Minsk Pedagogic Institute imeni A. M. Gor'kiy)

SUBMITTED: January 2, 1961

Card 2/2

ARABADZHI, V.I.

"Electricity in clouds and fogs."

Report submitted to the Third Intl. Conf. on Atmospheric and Space
Electricity, Montreaux, Switzerland May 1963

S/139/63/000/001/013/027
E202/E420

AUTHORS: Arabadzhi, V.I., Rudik, K.I.

TITLE: Electrification of dust in the atmosphere

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika,
no.1, 1963, 85-88

TEXT: The authors discussed the importance of the contact electrification of aerosols and showed that this mechanism could explain the intensity of ionization in the low layers of the atmosphere. An experiment involving lowering towards the Earth an artificial dust cloud was studied. The volume of ionization was measured by means of an instrument consisting of a cylindrical receiving condenser, an electrometer multi-stage circuit and a recorder. The internal electrode of the receiving condenser was amber insulated, while the external one was earthed to the chassis. Air drawn in from the surroundings entered the internal cylinder and, after passing through a cotton wool filter which collected its charges, left the apparatus through a special bush in the lower part of the condenser. A full circuit diagram and the component values of the instrument are given. A special relay was used to collect the charge from the internal electrode after different

Card 1/3

Electrification of dust ...

S/139/63/000/001/013/027
E202/E420

periods of time, viz. 8, 23 and 40 seconds. This discharge produced a current pulse in the electrometer tube, the magnitude of which was proportional to the charge on the condenser. A double diode was used to differentiate between the signs of the pulse; from the double diode the pulses were fed to a linear peak voltmeter with 100 μ A galvanometer in the anode circuit. The periodic operation of the relay was attained by means of an audio frequency generator with a step-up transformer. The instrument, which could be energized from mains or from a battery, was capable of measuring a current of 1.4×10^{-14} A. Road, peat, flour, coal and red-lead dust were used with the particle size distribution ranging from 9 to 68 μ and the population of about 35 to 63 p.p.cm³. The cloud was created at a height of 2 to 4 m above the surface. All dusts showed a negative volume charge with a maximum value of 2×10^{-7} cgse/cm³. It was concluded that a single large particle carried 3 to 6 elementary charges. Comparing their results with those of Obolenskiy and Steger, the authors concluded that the descent of a dust cloud gives rise to a volume charge smaller by 1 to 2 orders than in the case of the same cloud rotating (or

Card 2/3

Electrification of dust ...

S/139/63/000/001/013/027
E202/E420

rising). It is further concluded that the contact charging of aerosols in clouds is preferentially due to ion capture from the ambient medium. There is 1 figure.

ASSOCIATION: Belorusskiy tekhnologicheskii institut imeni
S.M.Kirova (Belorussian Technologic Institute
imeni S.M.Kirov)

SUBMITTED: September 9, 1961

Card 3/3

ARABADZHI, V.I. (Minsk); KHODASEVICH, S.G. (Minsk)

Damage of trees by lightning. Priroda 52 no.2:99-100 '63.

(Lightning) (Trees)

(MIRA 1612)

L 10590-65 ENT(1) GW

ACCESSION NR: AP4045508

S/0026/64/000/009/0095/0095

AUTHOR: Arabadzhi, V. I. (Professor, Minsk); Rudik, M. I. (Minsk) 8

TITLE: Echo from a large forest

SOURCE: Priroda, no. 9, 1964, 95

TOPIC TAGS: echo, echo sounding, sound reflection, forest, sound propagation, acoustic spectrum

ABSTRACT: The study of an echo in the atmosphere can give useful data on the reflecting surface and the medium through which the sound propagates. The paper describes a simple experiment in which the echo from a large pine forest located on a hill was recorded and its spectrum analyzed. The direct sound of a locomotive whistle and its echo from the forest were both recorded using a tape recorder. The records obtained were analyzed at Moscow University using an acoustic analyzer. The maximum energy in the sound spectrum of various locomotive whistles occurs at frequencies of 0.5-1.2 kcps, while the maximum energy in the echo spectrum in both cases occurs at one frequency only (0.8 kcps). This fact indicates the special features of the reflecting surface. It is concluded that the major role in the production of an echo is played not by the tree stems but by their crowns. Comparison of the acoustical spectra shows a marked increase in the absorption of high-

Card 1/2

L 10590-65

ACCESSION NR: AP4045508

frequency components with increasing distance between the sound source and the forest. Orig. art. has: 2 figures. 0

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: GP, ES

NO REF SOV: 000

OTHER: 000

Card 2/2

ARABADZHI, V.I., prof. (Tula)

Perception of the "golden section". Priroda 54 no.5:108-109
My '65. (MIRA 18:5)

ARABADZHI, V.I., prof.

Spectrum of thunder. Priroda 54 no.7:74-75 J1 '65.

(MIRA 18:7)

1. Pedagogicheskoy institut im. L.N.Tolstogo, Tula.

ARABADZHI, V.I., prof. (Uzb)

Sound in nature and the acoustical climate. Voprada 54

no.11:41-49 '65.

(MIRA 18:11)

ARABAUZHI, Y..., inzh.; LESNICHIIY, V.S., inzh.

Gas-torch cutting of aluminum and stainless steel. Svar. proizv.
no.9:38-39 S '65. (MIRA 18:9)

1. Nezhinskiy mekhanicheskiy zavod.

LESNICHIIY, V.S.; ARABADZHI, Ya.B.

Welding with an open arc and a bare, alloy wire. Avtom. svar .
17 no.4:82-83 Ap '64 (MIRA 18:1)

1. Nezhinskiy mekhanicheskiy zavod.

ARABADZHIEV, Borislav

Collective labor contracts and its role for fulfillment of the production plan. Trud i tseni 3 no.9:40-52 '61.

(Contracts) (Labor and laboring classes)

ARABADZHIEV, Iv.G.

Wild geese in Bulgaria. Priroda Bulg 12 no.2:39-44 Mr-Ap '63.

ARABADZHIEV, Ivan G.

A cuckoo. Prir i znanie 13 no.7:12-13 S '60.
(Cuckoos)

(EEAI 10:2)

ARABADZHIEV, Ivan G.

The eagle , a fisher. Prir i znanie 15 no.2:21-23 P '62.

ARABADZHIEV, Ivan G.

Sheldrakes. Priroda Bulg 12 no. 6: 98-101 N-D '63.

AREB:DEHILV, Ivan

Arvets. Priroda bulg 13 no. 3/1969 My-Je '64.

ARABADZHIEV, Ivan G.

The stilt (*Himantopus himantopus*). Prir i znanie 17 no. 6:20-22 Je '64.

DR: B. J. W. 1/4n G.

The small red-legged anipiper. Prir i znanie 17 no.9:19-21.
H 164.

ARABADZHYAN, L. S., tech.

... of loans for preparing clay-cement injection mortars. Izv. VNIIG
76:77-88 '64. (MIRA 18:10)

ARABAYEV, E.I.; BABENKO, I.S.; GLADKOV, G.M.; KAZAKOV, I.G.;
SEYDAKHMATOV, O.S.; SKRYNNIK, V.K.; TABALDYEV, R.D.,
kand. ekon. nauk, otv. red.

[Wage system on the collective beet farms of Kirghizistan;
using the example of the "Krasnyi Oktiabr'" Collective
Farm of Sokuluk District] Sistema oplaty truda v sveklo-
seiushchikh kolkhozakh Kirgizii; na primere kolkhoza "Krasnyi
oktiabr'" Sokulukского raiona. Frunze, Izd-vo "Ilim," 1964.
92 p. (MIRA 18:1)

ANDONOV, B.; ARABADZHIEV, S.

Dimitur Blagoev and public health. Suvrem. med., Sofia
7 no.9:99-102 1956.

(PUBLIC HEALTH
contribution of Dimitur Blagoev in Bulgaria)
(BIOGRAPHIES
Blagoev, Dimitur)

ARABADZHIEV, Stancho, inzh.

Creeping casings are making wide headways in building.
Stroitelstvo 11 no. 2:29-30 Mr-Ap '64.

ARABADZHIYEV, B.

Housing construction in Bulgaria. Zhil.-kom. khoz. 8 no. 8:33-34
'58. (MIRA 11:8)

1. Zaveduyushchiy otделom zhilishchnogo khozyaystva Ministerstva
kommunal'nogo khozyaystva, blagoustroystva i dorog Narodnoy Respubliki
Bolgarii.

(Bulgaria--Housing)

DENEV, St., inzh; ARABADZHIEVA, Sl., inzh.

- "Manual on ore, concentrate, and metal testing" by M. Mekhandzhiev and N. Rashev. Reviewed by St. Denev and Sl. Arabadzhieva. Min delo 17 no.7:47-48 J1 '62.

STOEV, St., inzh.; ARABADZHIEVA, Sl., inzh.; KRUMOV, Dim.

Use of electric conductivity for the control of some coefficients
of the ore-dressing process. Min delo 17 no.8:19-22 Ag '62.

1. Minno-geologiki institut.

IVANOV, N.; NIKOLOVA, Z.; GROMKOVA, R.; ARABADZHIYEVA, TS. [Arabadzhieva, TS.]; MANEV, D.; RANGELOVA, S.

Dynamics of the titers of the antibodies of influenza amidst the population in Bulgaria, 1959-1960. Trudy epidemiol mikrobiol 8: 105-109 '61 [publ.'62].

STAIKOV, Tsv.; ARABADZHIEVA, Z.

Determination of cation absorptive power in carbonate-free soils.
Izv Inst "Nikola Pushkarov" 6:77-84 '63.

HRABADZHIAN, A.Z.

ABABADZHIAN, A.Z., kand.ekon.nauk; BADI, Sh.M., kand.ekon.nauk; BAROYAN, O.V., doktor med.nauk; BASHKIROV, A.V., kand.ekon.nauk; BUSHEV, P.P., kand. ist.nauk; GLUKHODND, V.S.; DOROFYEVA, L.N., kand.filol.nauk; DOROSHENKO, Ye.A., kand.ist.nauk; ZAVISTOVICH, A.A.; IVANOVA, M.N., kand. ist.nauk; IVANOV, M.S., doktor ist.nauk; IL'INSKIY, G.N., kand.ist. nauk; KISIYAKOV, M.A., doktor ist.nauk; KOMISSAROV, D.S., kand.filol. nauk; KURDOYEV, K.K., kand.filol.nauk; MOISHEYEV, P.P., kand.ekon. nauk; PAKHALINA, T.N., kand.filol.nauk; PETROV, M.P., doktor geogra- ficheskikh nauk, prof.; PETROV, G.M., kand.ist.nauk; SOKOLOVA, V.S., doktor filol.nauk; TRUBNTSKOY, V.V.; PARKHADIYAN, A.I., kand.ist. nauk; SHOYTOV, A.M., kand.filol.nauk; ZAKHODER, B.N., doktor istori- cheskikh nauk, prof., otvetstvennyy red.; AKHRAMOVICH, R.T., kand. ist.nauk, red.; FALINA, A.I., kand.ist.nauk, red.; KUZNETSOVA, N.A., red. izd-va; SHVEYKOVSKAYA, V.R., red. izd-va; PRUSAKOVA, T.A., tekhn. red.

[Present-day Iran; a manual] Sovremenniy Iran; spravochnik. Moskva, 1957. 715 p. (MIRA 11:2)

1. Akademiya nauk SSSR. Institut vostokovedeniya. (Iran)

ARABADZHYAN, A.Z., otv. red.; VAGANOV, N.A., otv. red.; GRISHECHKIN, K.I.,
otv. red.; BOGOSLOVSKIY, V.V., otv. red.; BIRYUKOV, V.V., red.
izd-va; TSVETKOVA, S.V., tekhn. red.

[Economic conditions of Asian and African countries in 1961]
Ekonomicheskoe polozhenie stran Azii i Afriki v 1961 g. Mo-
skva, Izd-vo vostochnoi lit-ry, 1963. 616 p. (MIRA 17:1)

ARABADZHYAN, A.S., otv. red.; PEVONER, M.A., otv. red.; BERYUKOV,
V.V., red.

[Economic conditions of the Asian countries in 1962] Eko-
nomicheskoe polozhenie stran Azii v 1962 g. Moskva, Nauka,
1964. 273 p. (MIRA 17:11)

1. Akademiya nauk SSSR. Institut narodov Azii.

SOLNYSHKOV, V.A., red.; ARABADZHIAN, I.R., red.; GOL'DIN, A.L.,
red.; ZHAROV, N.I., red.; IOKHEL'SON, A.Ya., red.;
KRICHEVSKIY, I.Ye., red.; SKOMOROVSKIY, Ya.G., red.;
SUDAKOV, V.B., red.; SHEVCHENKO, A.N., red.; RZHONSNITSKIY,
B.N., red.

[Collection of reports on hydraulic engineering] Sbornik
dokladov po gidrotekhnike. Moskva, Gosenergoizdat, 1963.
262 p. (MIRA 17:9)

1. Nauchno-tekhnicheskaya konferentsiya molodykh nauchnykh
rabotnikov. 5th, Leningrad, 1959.

ARABADZHYAN, I.R., inzh.; ADAMOVICH, A.N., starshiy nauchnyy sotrudnik, kand.
tekhn.nauk

Stabilizing sandy soils by grouting with vibration-ground cements.
Izv.VNIIG 64:215-229 '60. (MIRA 14:5)
(Soil stabilization) (Grouting)

ARABADZHYAN, I.R., inzh.

Study of the characteristics of injection groutings of vibration-ground cements. Izv. VNIIG 65:171-189 '60. (MIRA 14:5)
(Grouting)

ARABADZHIAN, I.R., red.; IZMAYLOVA, R.A., red.; KRAYEV, G.A., red.
[deceased]; KRICHEVSKIY, I.Ye., red.; SOKOLOV, I.B., red.;
SOLNYSHKOV, V.A., red.; STREL'TSOVA, T.D., red.; FOMIN,
G.D., red.; SHUL'MAN, S.G., red.; ABRAMSON, L.S., tekhn.red.

[Collection of papers on hydraulic engineering] Sbornik dok-
ladov po gidrotekhnike. Moskva, Gosenergoizdat, 1962. 284 p.
(MIRA 17:3)

1. Nauchno-tehnicheskaya konferentsiya molodykh nauchnykh
rabotnikov. 4th, 1962.

YERYKHOV, B.P., kand.tekhn.nauk; ARABADZHYAN, I.R., inzh.; KOUGIYA, M.V.,
inzh.

Conference on soil stabilization. Gidr.stroi. 33 no.10:57 0 '62.
(MIRA 15:12)

(Soil stabilization—Congresses)

ARABADZIYEV, A.
ARABADZIYEV, A.

Organizing management of housing services in the Bulgarian
People's Republic. Zhil.-kom.khoz.7 no.11:30-31 '57. (MIRA 10:12)

1. Nachal'nik Otdela zhilishchnogo khozyaystva i gosudarstvennogo
imushchestva Ministerstva kommunal'nogo khozyaystva, blagoustroystva
i dorog.

(Bulgaria--Municipal services)

ARABAYEV, E.

Studies on the economy of the Kirghiz S.S.R. Vop. ekon. no.11:
150-152 N '60. (MIRA 13:11)

1. Zamestitel' direktora Instituta ekonomiki AN Kirgizskoy
SSR, g.Frunze.
(Kirghizistan--Economic research)

~~ARABAYEV, E.I.~~, kand. ekon. nauk; ORUZBAYEV, A.U., kand. ekon. nauk;
LEVITUS, B.I., otv. red.; ANOKHINA, M.G., tekhn. red.

[State farms and their role in developing the agriculture of
Kirghizistan] Sovkhozy i ikh rol' v razvitií sel'skogo khoziaistva
Kirgizskoi SSR. Frunze, Akad. nauk Kirgizskoi SSR, 1960. 70 p.
(MIRA 14:6)

(Kirghizistan--State farms)

GREBENNIKOVA, Lidiya Alekseyevna; ARABAYEV, E.I., otv. red.; SEMIKINA,
T.F., red. izd-va; ANOKHINA, M.G., tekhn. red.

[Ways to reduce the cost of milk on meat and dairy state farms in
Kirghizia] Puti snizheniia sebestoimosti moloka v miaso-molochnykh
sovkhozakh Kirgizii. Frunze, Izd-vo AN Kirgizskoi SSR, 1961. 68 p.
(MIRA 14:11)

(Kirghizistan--Dairying--Costs)

SOV/49-59-10-19/19

AUTHOR: Solov'yev, S. L.

TITLE: Session on Sedimentology and Tectonics of the Pre-Baikal and the Adjacent Regions

PERIODICAL: Izvestiya Akademii nauk SSSR
1950, No. 10, pp 1527-1528 (USSR)

ABSTRACT: The Section took place on the 9 to 17 June 1959. It

was convened by the Council on Seismology, Ac. Sc.
USSR; the East Siberian Geological Institute, Ac. Sc.
USSR.

USSR, the Institute of the USSR Academy of Sciences. It was created by the Chairman of the East Siberian Scientific Department, AC-Sc USSR Professor V. A. Gerasimov, the following

AC. SC. USSR. PROFESSOR. A. A. BAKOV, THE FORMER
SCIENTIST SUBSTANTIAL IN THE USSR. A. A. BAKOV
(Selenic Station Research) - Selenic Station of the USSR.

N. A. Florensov (East Siberian Geological Institute) -
 Enrichment Determined from Excavated Rocks, S. A.

(*) Petrunchuk (Institute of Physics of the Earth, Acad. Sci. USSR) - Geological Development in South Siberia.

V. A. Abramov (Moscow University) - Geomorphology and
Sedimentology of Mongolia, I. A. Rozanov (Institute
of Geology of the USSR Academy of Sciences)

ward 1/4

mining and metallurgy) - hydrobiological peculiarities of the Pre-Baikal, N. P. Ladokhin (East Siberian Geological Institute) - tectonic motions of the

Bottom of Gulf of Vostok, V. P. Sokolov and N. A. Florenskaya (Joint Siberian Geographical Institute) - Poch

of Geol-Alim' Zhuravskiy, S. V. Puchkov and P. V. Khavanova (Institute of Physics of the Earth, A.S. S.S.R.)

USSR) - Results of the Pro-Balkans Expedition
S. L. Solov'ev (Council on Science, Acad. Sci. USSR)
USSR) - Results of the Pro-Balkans Expedition

E. V. Pionnikov (Selskoe Station Irkutsk) and A. V. Vasyutskaya (Institute of Physics of the Siberian Academy of Sciences, Novosibirsk)

USSR) - Nations in the Pool of Strength, Balkan Enterprises, L.M. Publishing (Institute of Service of Earth, 22. 22.

USSR) - Lectures in the Field of Gobi-Altaï Archaeology.
A. P. Eshmurzov (Leningrad University) - Chart of the Gobi-Altaï

Geological Association of the Pre-Bukh.
Ye. A. Brechisnev (East Siberian Geological Institute)

2/4

Pro-Baker, V. M. Graybill (Institute of Salesmanship)
(Selling Station, Ixelles) - Selling - Sec'd. of the
of Construction - Selling - Sec'd. of the

of Construction, 7, K. M. Bazarova (Sakhalin Scientific Party's Crust. 7, K. M. Bazarova (Sakhalin Scientific Institute, Sakhalin Branch of A.S. S.S.S.R.) - Thickness

of the Earth's crust in the Far East, O. N. Golovnev, M. Z. Gvozdenchik and A. P. Lomayev (Institute of

Physics of the Earth, Atmos. Ocean. Tech. - Mean Estimates of the Earth's Crust in the Atlantic Sea. G. P. Gerasimov.

(Selenic Station Fotopriyovoy) - Zaryanovskaya in
Krasnoyarsk on the 4 May 1950. H. D. Zaryanov (Institute
of Geology, Acad. Sci. Azerbaijan SSR) - Fotopriyovoy
Station.

of Geology, Ac. Sc. Azerbaijan SSR) and for publication in *Azerbaijan Paleontological Journal* (Istanbul).
Geophysics and Geotectonics, Vol. 1, No. 3, 1967.

Scientific Investigations in China, and L. Hatcher, Jr.
(Committee for Science and Higher Education, Republican)

Republic) - Techniques of Secreted Monarchs. Officers who took part in one clandestine or two counter-revolutionary movements.

13 3/4
of the Ac. Sc. USSR, L. S. Fedotkin and Yu. A. Zborovskiy,
The Director of the East Siberian Geological Institute

M. M. Gaidarov, and the Deputy Director of the Institute of Physics of the Czech. Ac. Sc. USSR, V. V. Kostin. With great interest about the

Yu. A. Kozlovskii. The Session was closed by the
Rector of the Leningrad University, V. Ya. Rozov.

[illegible]

Downloaded from <http://ajph.org/> on November 10, 2015

CIA-RDP86-00513R000101910008-1"

ARABEY, B.G., inzh.

"Safety measures in pig iron and steel molding" by B.M. Belorusets.

Reviewed by B.G. Arabey. Bezop. truda v prom. 2 no. 6:39 Je '58.

(MIRA 11 :7)

(Molding(Founding))--Safety measures)

(Belorusets, B.M.)

AUTHOR: Soskin, D.S., Arabey, B.G. SOV-128-58-10-13/19

TITLE: Boxless-Stack Machine Molding (Bezopochno-stopochnaya mashinnaya formovka)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 10, p 30 (USSR)

ABSTRACT: Boxless-stack machine molding is described and is recommended for small and medium-sized foundries, to save space. The advantages consist in a high annual yield per square m of molding space, a high productivity of the machine, noiseless operation, maximum utilization of the equipment (due to double-sided extrusion), a minimum consumption of molding mixture and metal, and the lack of need for a large number of boxes. There are 2 diagrams.

1. Metals--Molding 2. Machines--Applications 3. Molding material--Processing

Card 1/1

ARABEY, B.G.

Bakelite facing mixtures for molds and cores. Lit.proizv. no.2:
13 F '60. (MIRA 13:5)
(Molding (Founding)) (Bakelite)

ACCESSION NR: AP4040474

S/0226/64/000/003/0109/0113

AUTHOR: Arabey, B. G. (Moscow); Salibekov, S. Ye. (Moscow);
Levinskiy, Yu. V. (Moscow)

TITLE: Ignitability of certain powder materials

SOURCE: Poroshkovaya metallurgiya, no. 3 (21), 1964, 109-113

TOPIC TAGS: metal powder, metal powder ignition, metal powder combustion, refractory compound ignition, zirconium ignition, niobium ignition, tantalum ignition, molybdenum ignition, tungsten ignition, titanium ignition, iron ignition, boron ignition, boride ignition, carbide ignition

ABSTRACT: Ignition temperature and the nature of combustion of some refractory metal, carbide, and boride powders have been determined in an effort to establish safe handling procedures for these materials. Tested powders had a grain size of 3-10 μ , the one most frequently used in powder metallurgy. Heating was done either in a furnace in an air atmosphere or by a point source (a nichrome spiral) brought into

Card 1/2

ACCESSION NR: AP4040474

contact with powder. It was found that the smaller the powder grain size, the more pyrophoric the powder. In the furnace, at grain sizes tested, powders of zirconium ignited at 270C, niobium at 290C, tantalum at 290C, molybdenum at 310C, tungsten at 410C, titanium at 520C (with a flash), nickel at 470C, iron at 470C (flash at 630C), and boron at 570C (with a flash). With a point heat source the ignition temperatures were generally higher than those obtained with the furnace, the difference varying from 10C for boron to 220C for molybdenum. Only iron ignited at 350C. Chromium and nickel remained intact at point source temperatures up to 1000C. Borides (TiB_2 , ZrB_2 , CrB_2 , HfB_2 , SiB_6 , B_4C) do not ignite under 1100C; zirconium, hafnium, niobium, and tungsten carbides have an ignition point ranging from 760 to 1000C. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 21Feb63

DATE ACQ: 06Jul64

ENCL: 00

SUB CODE: MM MA

NO REF SOV: 005

OTHER: 003

Card 2/2

L 32223-65 EWP(e)/EWT(m)/EWP(w)/EPF(n)-2/EWA(d)/EPR/T/EWP(t)/EWP(b) Pu-4/Pu-4
IJP(c) JD/JG/AT/WH

ACCESSION NR: AP4046747

S/0226/64/000/005/0065/0070

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B

AUTHOR: Arabey, B.G. (Moscow); Shtrom, Ye.N. (Moscow); Lapitskiy, Yu.A. (Moscow)

TITLE: Characteristics of the production process of compact parts and mechanical properties of certain rare metal hexaborides

SOURCE: Poroshkovaya metallurgiya, no. 5, 1964, 65-70

TOPIC TAGS: ²⁷lanthanum boride, ²⁷samarium boride, ²⁷europium boride, ²⁷dysprosium boride, hot workability, density, ¹⁶brittleness

ABSTRACT: The authors investigated the laws governing the hot workability of La, Sm, Eu and Dy hexaborides and assessed their mechanical properties. 10 mm diam. and 70x30x20 mm specimens were subjected to hot pressing for 1 to 25 minutes. Compact parts having a density that approximates the calculated value were produced within the 1950 to 2050 C range under a load application of 500 dn/cm². It is noteworthy that the effect of specific pressure on elasticity was found to be negligible and the temperature of initial shrinkage was invariable for all specimens. Appreciable brittleness was noted in all specimens. Bending

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L 32223-65

ACCESSION NR: AP4046747

strength at room temperature was 13 to 18 dn/mm². Orig. art. has: 5 figures and 4 tables

ASSOCIATION: None

SUBMITTED: 25Oct63

ENCL: 00

SUB CODE: MM

NR REF SOV: 005

OTHER: 002

Card 2/2

1. 23500-65 | EWT(m)/EWP(e)/EPP(n)-2/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-l/Pu-l/Pad
 ACCESSION NR: AP5001597 IJP(b) JD/WW/HW/ S/0226/64/000/006/0110/0113

JG/WB

AUTHOR: Arabey, B. G. (Moscow); Levinskiy, Yu. V. (Moscow); Salibekov, S. Ye. (Moscow)

TITLE: Spontaneous combustion and pyrophoric properties of certain powder materials.

SOURCE: Poroshkovaya metallurgiya, no. 6, 1964, 110-113

TOPIC TAGS: spontaneous combustion, powder metallurgy, worker safety, pyrophoric property, titanium powder, zirconium powder, hafnium powder, niobium powder, tantalum powder, chromium powder, ignition temperature, nickel powder, iron powder, boron powder, silicon powder

ABSTRACT: The article presents the results of an investigation of the behavior of powdered titanium, zirconium, hafnium, niobium, tantalum, chromium, iron, nickel, boron, and silicon with these powdered metals in an inert medium and in a vacuum with high-temperature heating. The effect of moisture content and grain size of the powders on their ignition temperature in a nitrogen medium was demonstrated. Nitriding of the metal powders was carried out at 800-1400C. Spontaneous combustion was observed only for powdered Ti, Zr, and Hf, the ignition temperature being about the same for all three powders, 450-500C. It was found that, although the

Card 1/2

ALABAY, I. L., and Med Gai — (diss) "Hemipneumographic study of shock and minute volumes of blood and the results of treating hypertension at the Elabovsk health resort," Yerevan, 1980, 15 pp (Yerevan Medical Institute) (HL, 25-80, 110)

ARABSY, I.L., kand.med.nauk

Radioscopic diagnosis of mitral stenosis and juxtaposition of
X-ray data on patients following commissurotomy. Vop.rent.i
onk. 6:29-38 '61. (MIRA 16:2)
(MITRAL VALVE—SURGERY) (HEART—RADIOGRAPHY)